# **Aaron Kitchener**

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# Education

University of Washington // B.S. Mechanical Engineering – Mechatronics

Cumulative GPA: 3.71 | Sept 2015 – June 2019 | Seattle, WA

# Experience

## Controls Engineer // Fives Lund, LLC

June 2018 - Present

#### Engineering

- Guiding projects from concept to final production configuration
- Creating user interfaces, both physical and web-based
- Programming PLCs to perform motion and process control, data acquisition, and safety monitoring
- Designing control cabinets, selecting sensors, and sizing servo motors
- Drafting electrical schematics documenting in-cabinet and external devices

#### **Project Management**

- · Leading controls design for multi-million dollar aerospace manufacturing machines
- · Facilitating collaboration with internal teams and clients during design and testing
- Presenting and defending designs in high-profile client meetings
- Managing a team of technicians during machine assembly and commissioning

## Haptics Calibration Capstone // PACCAR @ University of Washington

Jan 2019 - June 2019

"How do we quantify what makes a switch feel high-quality?"

- Developed a test rig to measure the force-displacement curves of semi-truck cabin switches
- Programmed two Arduino Mega 2560 controllers to perform motion control and measurement
- Implemented a user-friendly interface consisting of a keypad and LCD
- Generated a benchmark characteristic curve to aid in future switch design

### Chassis Team Lead and Member // UWashington Formula Motorsports

Sept 2015 – June 2018

- Managed a team of seven students responsible for designing a Formula SAE racecar chassis
- Advised design of our carbon fiber monocoque
- Manufactured innumerable composite parts and molds
- Gained extensive design knowledge of composite structures and manufacturing processes
- Designed, manufactured, and tested a composite crash structure to attenuate front-end collisions

## Mechanical Design Intern // Tesla

June 2016 - Sept 2016, June 2017 - Sept 2017

- Developed dynamometer components to support Roadster, Semi, and Model 3 motor testing
- Drafted technical drawings utilizing GD&T
- Interfaced with machine shops during manufacturing of my parts to ensure quality
- Implemented a version control system for all CAD parts owned by my team

# Skills

- SolidWorks, CATIA V5, AutoCAD Electrical
- C, Python, IEC PLC Languages, MATLAB, Java
- Advanced composites design and manufacturing
- Mechanical Design and Prototyping
- Concept Generation
- Presentation

### **Activities**

#### **Motorsports**

If there is one passion that defines me, it's my love for cars. I spend most of my free time driving and maintaining a 1999 Chevy Corvette and 1981 BMW 320i.

#### Film Photography

I enjoy shooting color and B&W film using an Olympus OM2n and Holga 120CFN, focusing on automotive photography and great pictures of my friends.